Technische Universität Dresden - Institute of Lightweight Engineering and Polymer Technology

Technische Universität Dresden

TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

Chair (W2) of Vibroacoustics and Equipment Technology in Lightweight Engineering

At the Faculty of Mechanical Science and Engineering, the Institute of Lightweight Engineering and Polymer Technology invites applications for the Chair (W2) of Vibroacoustics and Equipment Technology in Lightweight Engineering to be filled at the earliest possible date.

City: Dresden; Starting date (earliest): At the earliest possible; Duration: unbefristet; Remuneration: W2; Closing date: 26/03/26

Tasks

The chair represents the scientific field of vibroacoustics and equipment technology in lightweight construction in research and teaching. It focuses on innovative developments in multifunctional lightweight engineering and aims to strengthen the institute's expertise, particularly in two closely interlinked and future-oriented areas. On the one hand, this is the field of vibroacoustics and vibration management of lightweight structures, with a focus on the analysis, modeling, and control of the acoustic and vibration behavior of highly stressed lightweight structures. This includes, in particular, the development of methods for the targeted adjustment of damping, emissions, and vibroacoustic performance, for example, in aerospace or process engineering applications. On the other hand, the field of multifunctional lightweight structures for device technology applications will be pursued with a focus on the design, modeling, development and manufacture of novel multifunctional lightweight components, for example for medical or automotive engineering, in fiber composite and hybrid construction, as well as on the development of associated measurement and testing technology. A particular focus here is on the integration of sensors and actuators in a manner that is suitable for manufacturing and stress conditions. The chair's range of tasks includes acquiring and implementing projects in both fundamental and application-

oriented research, publishing in recognized journals, and promoting transfer and interdisciplinary cooperation with partner institutions in the DRESDEN-concept, a research alliance of TUD, as well as local non-university research and cultural institutions.
The chair covers the teaching areas of vibroacoustics and equipment technology in lightweight construction within the degree programs Lightweight Engineering in the German and English-language diploma, bachelor's, and master's degree programs offered by the Faculty of Mechanical Science and Engineering. This includes courses on function-integrated components, adaptive structures for lightweight construction as well as fiber composites and polymers in medical engineering, as well as, in future courses, measurement technology. The chair also contributes to the further development and internationalization of these degree programs. It is also involved in academic self-administration and participates in committees of the Faculty of Mechanical Science and Engineering and TUD.

Requirements

We are looking for you (m/f/x) with internationally proven, clearly defined, and innovative expertise in the fields of vibroacoustics, active and passive structural damping, and multifunctional fiber composite structures. Your publications and international network serve as proof of this. Your research achievements have high development potential. In particular, fundamental and application-oriented research experience in the fields of medical and automotive technology, success in acquiring third-party funding, and experience in technology transfer are required. Your willingness to acquire DFG projects and your interest in participating in collaborative research are a given. Your own professional experience in an industrial environment is also desirable.
You inspire our students with your high level of motivation and have proven teaching skills, demonstrated by extensive experience in independently conducting bilingual courses and the results of your teaching evaluations. Your participation in academic self-administration is a given. In addition to existing skills, there should be a focus on the development of participatory and collaborative research methods. Your independent, reflective way of working, strategic thinking, sense of responsibility, and motivational leadership of interdisciplinary, diverse teams round off your profile.
The requirements for appointment, official duties and administrative status are governed by §§ 59, 69, 71 of the Act on Higher Education Institutions in the Free State of Saxony (SächsHSG) and the Regulations on Duties and Responsibilities of Institutes of Higher Education (HSDAVO).

What we offer

For further questions, please contact the Dean of the Faculty of Mechanical Science and Engineering, Prof. Dr. Michael Beckmann, phone +49 351 463-32786; email: berufungen.mw@tu-dresden.de.
TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment. If you have any questions about these or related topics, please contact the team of the Equal Opportunities Officer of the Faculty of Mechanical Science and Engineering (gleichstellung.mw@tu-dresden.de) or the Representative of Employees with Disabilities (Mr. Roberto Lemmrich, phone +49 351 463-33175, schwerbehindertenvertretung@tu-dresden.de).

Application

We look forward to receiving your application by March 26, 2026 (time stamp on the email server or the stamped arrival date of the University Central Mail Service of TUD applies).
Please include the following documents with your application letter:
— curriculum vitae in table form, a synopsis of your academic career
— a list of academic publications and overview of research projects with details of third-party funding acquired
— a list of courses, results of teaching evaluations covering the last three years
— a research and teaching concept and
— copies of all academic certificates.
We kindly ask you to submit your application by email. Please use the SecureMail Portal of TUD (https://securemail.tu-dresden.de) and send your documents in a single PDF document to: berufungen.mw@tu-dresden.de. If you are applying by regular mail, please also attach your application documents in electronic form (CD or USB thumb drive) and send them to:
TU Dresden, Fakultät Maschinenwesen, Dekan, Prof. Dr. Michael Beckmann, Helmholtzstr. 10, 01069 Dresden, Germany.

Die TUD ist Gründungspartnerin der Forschungsallianz DRESDEN-concept e.V.
Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis.

More information at https://stellenticket.de/201710/TUBS/
Offer visible until 26/03/26